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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,943	04/26/2001	Qing Wang	13126-002001	1192
26161	7590	12/22/2003	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			TRINH, TAN H	
			ART UNIT	PAPER NUMBER
			2684	3

DATE MAILED: 12/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/842,943

Applicant(s)

WANG, QING

Examiner

TAN TRINH

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 11 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 4, 6-10, 12, 13 and 17-22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. Claims 4, 6-10, 12-13 and 17-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Reasons for allowance***

2. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 4 and 17, the prior art of record fail to teach, the communicating with an interface module, comprising interpreting the received data according to the specific protocol and outputting dot-information corresponding to the handwriting characters, as cited in claim 4. (Claim 6-10, 12-13 and 18-22 are dependent claim).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5, 11 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (U.S. Patent No. 6,333,973) in view of Fukushima (U.S. patent No. 5,724,457).

Regarding claims 1 and 14, Smith teaches the method for inputting, displaying and transmitting handwriting characters in a mobile phone (see figs. 1-3 and 13C, and col. 11, lines 11-15) comprising the following steps of:

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- a) inputting handwriting characters (see fig. 13C, col. 9, and lines 18-20);
- b) sampling the handwriting characters (see fig. 13C, col. 9, lines 18-20, when the mobile phone bit map the ink message and converts it to SMS characters for transmission which it sampling and encoding before transmitted); ;
- c) performing A/D conversion of the sampled handwriting characters to obtain a signal (see fig. 3, col. 5, lines 35-36, and fig. 13C, col. 9, lines 18-20, when the mobile phone bit map the ink message and converts it to SMS characters for transmission which it sampling and encoding before transmitted);
- d) encoding the signal in accordance with a specific protocol to obtain encoded data (see col. 7, lines 8-11)
- e) converting the encoded data into mobile phone acceptable data, and outputting them (see col. 7, lines 8-11) ;
- f) processing the mobile phone acceptable data to display the handwriting characters and to transmit them as a short message, or to receive and display a short message (from other mobile phone) comprising the handwriting characters (see fig. 8B and col. 9, lines 17-22, fig. 9 A-B and col. 9, lines 24-27, fig. 13A-C).

Moreover, Fukushima also teaches the method for inputting handwriting characters in electronic device or equipment ( see Fukushima, col. 1, lines 14-20); and comprising the steps of: inputting handwriting characters ( see Fukushima, col. 1, lines 14-20); the sampling the handwriting characters (see col. 3, lines 1-5), performing A/D conversion of the sampled handwriting characters (see col. 3, lines 1-5), and encoding the signal (see col. 9, lines 8-11).

Therefore it would have been obvious to modify the system of Smith and by the teaching of Fukushima on the sampling and encoding technique thereto in order to input the handwriting character directly on the mobile phone display so that user can write message (SMS) on cell-phone easier.

Regarding claims 2 and 15, Smith teaches the performing a level conversion with respect to an external interface of a handwriting character input module (see col. 6, 27-59).

Regarding claims 3 and 16, Smith teaches providing an additional power supply to the handwriting character input module (see fig. 3 switching power supply 3900 and battery pack 3800, col. 6, lines 60-65).

Regarding claim 5, Smith teaches decoding the short message including the handwriting characters after receiving it so that the handwriting characters included in the short message can be identified (see col. 8, lines 12-34).

Regarding claim 11, Smith teaches wherein the step of decoding the short message including handwriting characters includes the following steps of determining whether or not the received short message includes handwriting characters; decoding the handwriting characters if the short message includes the handwriting characters; and processing standard characters included in the received short message in a conventional manner, if any (see col. 8, lines 27-30, lines 46-57, col. 10, lines 61-67, col. 11, lines 1-11).

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***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kim (U.S. Patent No. 6,477,274) discloses handwritten character recognition devices and electronic devices incorporating same.

Shin (U.S. Patent No. 6,351,634) discloses mobile telephone and method for registering and using special symbols as a password in same.

Ulgen (U.S. Patent No. 6,272,243) discloses method and apparatus for entering characters into a writing recognizer.

6. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314, (for Technology Center 2600 only)**

*Hand-delivered responses should be brought to Crystal Park II,  
2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Trinh whose telephone number is (703) 305-5622. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung, can be reached at (703) 308-7745.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.

Tan H. Trinh  
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Dec. 11, 2003

A handwritten signature in black ink, appearing to read "Mark Conner", written over a horizontal line.